

REMARKS

Claims 1 and 9-12 have been amended. The amended claims are broader in scope than those presented in the last-filed Amendment. Limitations that were added in the last-filed Amendment have been deleted. The amended claims generally correspond to those presented in the Amendment dated August 30, 2007. Claims 1-12 are pending. Applicant reserves the right to pursue the original and other claims in this and other applications.

Claims 1-12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Mine (US 6243338). Applicant respectfully traverses the rejection. Please note that the current claims generally correspond to those presented in the Amendment dated August 30, 2007 but now recite that the controller "manages the first region," but in other respects are substantially broader than the previous claims.

The claimed invention relates to a data recording device for reading data recorded on a rewritable recording medium having recorded and unrecorded regions, and for recording data on and for reproducing data from a recording medium. When an unrecorded region (first region) precedes a recorded region (second region) and the DVD+RW drive is requested to reproduce data from the second region, the DVD+RW drive cannot correctly extract the address of the second region due to the existence of the unrecorded first region. Thus, when recording data to a requested region, one ECC block of dummy data (run-in-block) is also recorded in the region preceding the requested region to allow the DVD+RW drive to determine the address of the requested region when reading the requested region. In one embodiment, the recording unit has a mark recording unit configured to record a mark in one of the unrecorded regions (first regions) preceding an object region (second region) to which the recording unit is to record data,

the mark enabling reading of the object region. When recording data to an unrecorded region, one ECC block of dummy data (run-in-block) is recorded in the unrecorded region and managed as "unrecorded" in the bitmap. For more details please refer to the specification, Figures 4-6; page 9, line 15+. The claimed invention should not be limited, however, to the preferred embodiments described and shown in the specification and drawings.

An important feature of the claimed invention as recited in claim 1 is the recording unit having "a dummy data recording unit that records dummy data in the first region when the . . . first region is unrecorded" and "a controller that identifies and manages the first region recorded with the dummy data as one of the unrecorded regions." This is an important feature of the invention. Typically, a DVD-ROM drive cannot reproduce data on the DVD+RW disk having both recorded and unrecorded regions unless the DVD+RW disk is pre-formatted to record data all over the disk. The advantages of the feature are that it enables data to be reproduced even when formatting of the recording medium has not been completed and it enables the DVD+RW drive to smoothly deal with an unrecorded region without the occurrence of errors.

Mine discloses a technique of using a bitmap containing information indicating a recorded or an unrecorded state. In Mine, the first region recorded with dummy data is identified as "recorded" to enable a DVD+RW to be readable by a ROM drive but the DVD+RW drive cannot distinguish between the run-in-block and the region having user data. Unlike Mine, in the claimed invention, the first region (run-in-block) recorded with the dummy data is identified to be and managed as "unrecorded" in the bitmap. This allows the DVD+RW drive to read data from the run-in-block, generate dummy data and transmit dummy data to the user, thereby avoiding reading errors.

Further, Mine discloses a finalizing process which determines whether each block is recorded or unrecorded, and records a finalization data before and after a recorded area of a user area. On the other hand, the present invention is related to recording dummy data in a first region immediately prior to the region where data are to be recorded and the dummy data are recorded before finalization. Furthermore, in its Office Action dated May 31, 2007, the Examiner contended that column 12, lines 54-64 of Mine disclose that dummy data is recorded in the first region. Applicant respectfully disagrees. The cited portions of Mine only disclose whether an area to which finalization data is recorded is a recorded or a non-recorded area. For at least these reasons, the § 102(b) rejection of claim 1 should be withdrawn and the claim allowed.

Claims 2-12 depend from claim 1 or contain similar limitations as claim 1.
Therefore, claims 2-12 should be allowable at least for the same reasons as claim 1.

In view of the above, Applicant believes the pending application is in condition for allowance.

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